MEMO

To:	Argyle Council
From:	Hans Pfeil and Alain Muise
Date:	November 10, 2019
Re:	Tusket New Road Construction and Sewer Extension

This Memo is prepared to inform about the construction progress for the development of a new municipal road and sewer extension. The Project was awarded to Aberdeen Paving Ltd. on September 25th 2019 and the contractor started immediately after the award notification. The total budget approved was at \$250,000 CAD and the bid came in at \$194,473 CAD, but the bid does not include the second layer of paving that was set to be done in the spring of 2020, so barring any unforeseen issues, we would remain within budget.

The project started off fairly smooth with grubbing and clearing the work area, the neighbor to the south was concerned about the trees along the property boundary and how close the excavator had removed the soil on our side of the boundary. The contractor was advised to keep a buffer of 6-10feet to the boundary and minimize soil disturbance. All privacy created by existing trees is to remain, we want for our neighbors to have similar privacy as before. All grubbing and clearing material was trucked off site to a composting facility where the organic material will be recycled. Soon after clearing and grubbing was completed the contractor started to shape the road profile into the existing sub grade material. During this work they came across the area of an old pond which was filled in with random material years ago. This material was determined unsuitable for a road construction and was mentioned in the Geotech report from 2017, so it was not surprising to staff.

After discussion with our engineer and the contractor we agreed to replace the unsuitable material and refill the area with a layer of rocks and then structural fill material from a local pit. The additional costs are still not determined, it is likely that the result will push us over budget slightly. The road is constructed at high quality standard, with a long-term life span envisioned. As you are aware, the public road shall be phased in, with the first section allowing for development behind the location of our admin building.

The contractor continued with shaping the road profile and raised concerns about the grading on top of the hill about 200m into the road. The goal was to cut some material of the hill top and use it for fill material along the first 100m of the road to create a gentle increasing road profile. The concern was that the grading was planned not well enough to create enough cut, which would create fill material. The contractor indicated that they had to bring in more material, which would result in more cost. The area was re-surveyed and grading adjusted. The surveyor marked out the revised grading on site and we noticed that the grading was too low this time and too much cutting was needed and extra material had to be trucked off site. The engineer was asked to adjust the grading to optimize the cut and fill.

The neighbor to the south was kindly asking if he would be allowed to create a driveway from his property directly to our new road at about 200m into the road. We accepted his request and are creating a culvert and driveway for him at a suitable location at no extra cost.

After all grading and soil replacement was sorted out, the contractor started his work on the sewer installation and came across the issue that the existing main line was shown on the wrong side of Hwy 308. The contractor cut through the highway in error after they found the sewer main line on the near side of the highway 308. A manhole

was installed and the new sewer line is installed for up to 170m. The remaining 130m will be installed over the next few days. We are still investigating where the error on the design drawings came from.

Due to the issue with soil replacement the new soil has to settle in first and with the wet weather we still have too much standing water within the old pond area. The Geotech recommended two options:

- 1. Replace 6" to a 1' of depth of the new soil with dry material as it is within the paved area. This would create additional cost due to trucking and excavation work.
- 2. Defer paving into the next year when the weather is drier and let the area dry out naturally. This method would not create additional cost.

We made the decision to follow option 2 to avoid further costs increases. The road will be built up with gravel and accessible for any type of vehicle. Paving could be deferred until the new admin building is substantially completed to avoid damage to the new pavement from construction equipment.

Currently, the work at the new road in Tusket is almost completed except for one small detail. Due to water issues and some wet spots we had to postpone the paving of the first 100m into next spring/summer to let is dry out naturally. The contractor is finishing up today or Tuesday with installing the gravel layers and the road would be technically usable, but due to slightly wet spots the contractor recommended to block off the road with large rocks. This will ensure the water spots can dry out over time and protect us from additional costs. Blocking of the road also avoids people from parking further in and potentially litter or make damage to the new road.

The Department of Public Works is available for any questions or concerns.

Regards,

Hans Pfeil – Director of Public Works – Municipality of Argyle